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(54) Abstract Title Liquified gas cryostat

(57) A liquified gas cryostat having an inner wall (3) to contain the liquified gas (4) and an other wall (2) spaced therefrom is provided, in the space between the two walls, with multilayered insulation (5), formed by coating a woven fabric with a thin layer of gold or aluminium to create small, self-defined areas of metallization, and the space is evacuated. Also in the space is located at least one radiation shield (6) of material which exhibits high thermal conductivity and negligible electrical conductivity. The shield (6) extends beneath and is continuous around the inner wall (3) over the volume intended to be occupied by the liquified gas and may be vapour-cooled or cryo-cooled. Where more than one shield is used, both or all of them may, be vapour-cooled or cryo-cooled. Alternatively, one or more of the shields may be vapour-cooled and the remainder cryo-cooled.

